

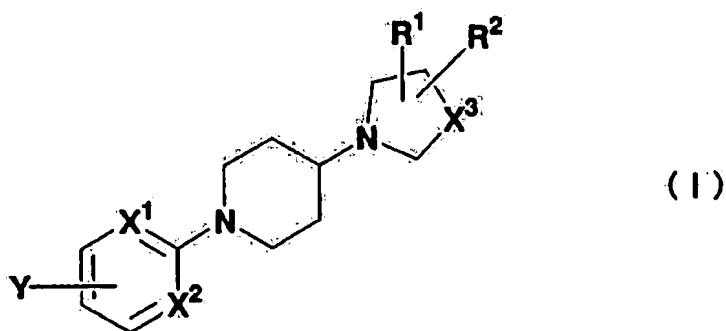
AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-33 and insert therefor Claims 34-47 as follow. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-33 (Canceled)

34. (New) A compound of the formula (I):



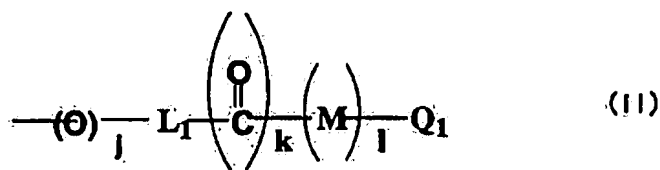
wherein:

X^1 and X^2 represent CH;

X^3 represents $-O_s-(CH_2)_m-$, wherein s indicates 0 or 1, and m indicates an integer to make $(m + s) = 0, 1, 2, 3$ or 4;

R^1 and R^2 independently represent a hydrogen atom, a halogen atom, a linear or branched lower alkyl group, a lower alkoxy group, or an acetyl group substituted with 2 or 3 fluorine atoms;

Y represents a group of the formula (II):



wherein in formula (II):

j, k and l independently indicate 0 or 1;

L₁ represents a C1 to C4 lower alkylene group or a single bond;

M represents an oxygen atom or a group of the formula (III):



wherein in formula (III) R⁰ represents a hydrogen atom or a C1 to C4 lower alkyl group; Q₁ represents a linear or branched lower alkyl group, an optionally-condensed C3 to C9 cycloalkyl group, a phenyl group, a naphthyl group, or an optionally-condensed 3- to 8-membered heterocyclic group (the hetero ring may have from 1 to 3 hetero atoms selected from a group consisting of an oxygen atom, a sulfur atom and a nitrogen atom), which is unsubstituted or has a substituent selected from a group consisting of a cyano group, a hydroxyl group, a lower alkyl group (the lower alkyl group may be further substituted with a hydroxyl group, a halogen atom, an amino group, an aryl group or a heteroaryl group), a cycloalkyl group, a lower alkoxy group (the lower alkoxy group may be further substituted with a halogen atom), a halogen atom, a mono-lower alkylcarbamoyl group, a di-lower alkylcarbamoyl group, a carbamoyl group, a cycloalkyliminocarbamoyl group, a lactam ring, a trifluoromethyl group, a mono-lower alkylamino group, a di-lower alkylamino group and an alkanoyl group);

with the proviso that:

- 1) Y is not an alkoxycarbonyl group, or
- 2) Y is not a group of the formula (II-1):



with the exception of a compound which is:

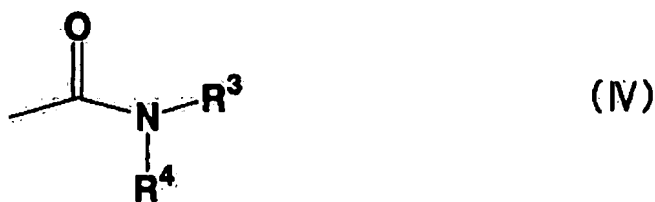
1-[4-(piperidin-1-yl)piperidin-1-yl]-4-(7-carbamoyl-1H-benzimidazol-2-yl)benzene,
1-{4-(piperidin-1-yl)piperidin-1-yl}-4-(5-cyano-6-oxo-pyridin-2-yl)benzene, or
1-{4-(pyrrolidin-1-yl)piperidin-1-yl}-4-(5-cyano-6-oxo-pyridin-2-yl)benzene;
or a pharmaceutically-acceptable salt thereof.

35. (New) The compound of Claim 34, wherein R¹ and R² are hydrogen atoms, X³ is -O_s-(CH₂)_m-, wherein s is 0 and m is an integer which is 1, 2 or 3.

36. (New) The compound of Claim 34, wherein X^3 is $-O_s-(CH_2)_m-$, wherein s is 0 and m is an integer which is 1, 2 or 3, to form a nitrogen-containing heterocyclic group which is selected from 1-pyrrolidinyl, piperidinyl and 1-hexamethyleneiminyl.

37. (New) The compound of Claim 36, wherein X^3 is $-O_s-(CH_2)_m-$, wherein s is 0 and m is an integer which is 2, to form a piperidinyl group.

38. (New) The compound of Claim 34, wherein Y is a group of the formula (IV):



wherein:

R^3 is a hydrogen atom, or a lower alkyl group, and

R^4 is a group of the formula (V):



wherein R^5 represents a hydrogen atom, a lower alkyl group, a C3 to C8 cycloalkyl group, an aralkyl group, or a heteroaryl group; n indicates 0 or an integer which is 1, 2, 3 or 4.

39. (New) The compound of Claim 34, wherein in formula (II), Y is a group of the formula (IV):



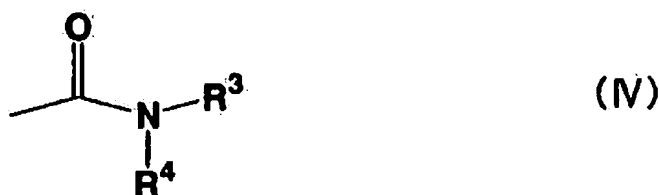
wherein R^3 is a hydrogen atom, or a lower alkyl group, and

R⁴ is a group of the formula (VI):



wherein A represents an aryl group, a heteroaryl group, a condensed bicyclic group of a C4 to C7 cycloalkyl group and an aryl group, or a condensed bicyclic group of a C4 to C7 cycloalkyl group and a heteroaryl group; q indicates 0 or an integer which is 1, 2 or 3.

40. (New) The compound of Claim 34, wherein Y is a group of the formula (IV):



wherein R³ and R⁴ form a nitrogen-containing heterocyclic group which is joined with the nitrogen atom to which they bond.

41. (New) The compound of Claim 40, wherein the nitrogen-containing heterocyclic group is selected from: piperidinyl, pyrrolidinyl, azetidiny, homopiperidinyl, and heptamethyleneiminyl.

42. (New) The compound of Claim 41, wherein the nitrogen-containing heterocyclic group is piperidinyl.

43. (New) The compound of Claim 34, wherein Y is an aryl group or a 5-membered or 6-membered heteroaryl group (wherein the heteroaryl group has, in the ring thereof, from 1 to 3 hetero atoms selected from a group consisting of a nitrogen atom, a sulfur atom and an oxygen atom), which is unsubstituted or substituted with 1 or 2 substituents selected from a group consisting of a lower alkyl group, a lower alkoxy group, a hydroxyl group and a halogen atom.

44. (New) A compound which is selected from the group consisting of:

N-methyl-N-(1-methylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-(1-methylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-cyclobutylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-cyclopentylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-cyclohexylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-cyclohexylmethylpiperidin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-[(3R)-1-cyclopentylpyrrolidin-3-yl]-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-[(3S)-1-cyclopentylpyrrolidin-3-yl]-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-[(3R)-1-benzylpyrrolidin-3-yl]-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-[(3R)-1-benzylpyrrolidin-3-yl]-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-(pyridin-4-yl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide trifluoroacetate,
2-{4-(piperidin-1-yl)piperidin-1-yl}benzoyl-1,2,3,4-tetrahydroisoquinoline,
1-{4-(piperidin-1-yl)piperidin-1-yl}benzoyl-1,2,3,4-tetrahydroquinoline,
1-{4-(piperidin-1-yl)piperidin-1-yl}benzoyl-4-phenylpiperazine,
N-methyl-N-[1-(pyrimidin-2-yl)piperidin-4-yl]-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(thiophen-2-yl)methyl-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-phenethyl-4-[4-(piperidin-1-yl)piperidin-1-yl]benzamide,
1-{4-(piperidin-1-yl)piperidin-1-yl}benzoyl-3-(3,4-difluorophenyl)pyrrolidine,
4-{4-(piperidin-1-yl)piperidin-1-yl}benzoylpiperidin-1-yl,
N-methyl-N-(1-methylpiperidin-4-yl)-4-[4-(pyrrolidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-methylpiperidin-4-yl)-4-[4-(azetidin-1-yl)piperidin-1-yl]benzamide,
N-methyl-N-(1-methylpiperidin-4-yl)-4-[4-(4,4-difluoropiperidin-1-yl)piperidin-1-yl]benzamide,
1-[4-(piperidin-1-yl)piperidin-1-yl]-4-(3-pyridyl)benzene,
1-(piperidin-1-ylmethyl)-4-[4-(piperidin-1-yl)piperidin-1-yl]benzene,
or a pharmaceutically-acceptable salt thereof.

45. (New) A pharmaceutical composition which comprises an inert carrier and a compound of Claim 34, or a pharmaceutically acceptable salt thereof.

46. (New) A pharmaceutical composition which comprises an inert carrier and a compound of Claim 44, or a pharmaceutically acceptable salt thereof.

467. (New) A method for treating a disease or disorder selected from the group consisting of: obesity, diabetes, hormone secretion disorder, hyperlipemia, gout, fatty liver; circulatory system disease, stenocardia, acute cardiac insufficiency, congestive cardiac insufficiency, cardiac infarction, coronary arteriosclerosis, hypertension, nephropathy, sleep disorder, diseases accompanied by sleep disorder, idiopathic hypersomnia, repetitive hypersomnia, true hypersomnia, narcolepsy, sleep periodic acromotion disorder, sleep apnea syndrome, circadian rhythm disorder, chronic fatigue syndrome, REM sleep disorder, senile insomnia, night worker sleep insantation, idiopathic insomnia, repetitive insomnia, true insomnia, electrolyte metabolism disorder, central nervous system disease, peripheral nervous system disease, bulimia, emotional disorder, melancholia, anxiety, epilepsy, delirium, dementia, shinzophrenia, attention deficit/hyperactivity disorder, memory disorder, Alzheimer's disease, Parkinson's disease, sleep disorder, recognition disorder, motion disorder, paresthesia, dysosmia, epilepsy, morphine resistance, narcotic dependency, and alcoholic dependency; in a mammalian patient in need thereof which comprises administering to the patient a therapeutically effective amount of the compound of Claim 34, or a pharmaceutically acceptable salt thereof.